

GenCore version 5.1.4.p5.4578
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OM protein - protein search, using sw model

Run on: May 16, 2003, 09:00:41 ; Search time 31.6842 Seconds

(without alignments)
340.942 Million cell updates/sec

Title: US-10-032-658-11

Perfect score: 664
Sequence: 1 MAFKTCGFSSKMLVIAIVM.....DSTNCKYKATACNSTGCPGH 112

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 362588 segs, 96450795 residues

Total number of hits satisfying chosen parameters: 362588

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/1/pubppaa/US08_NEW_PUB.pep:*
2: /cgn2_6/ptodata/1/pubppaa/PCIT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubppaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubppaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubppaa/PCITUS_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubppaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubppaa/US09_NEW_PUB.pep:*
10: /cgn2_6/ptodata/1/pubppaa/US09_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubppaa/US10_NEW_PUB.pep:*
12: /cgn2_6/ptodata/1/pubppaa/US10_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pep:*
14: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match Length | ID | Description |
|------------|-------|--------------------|--------------------------|-------------------|
| 1 | 664 | 100.0 | 112 9 US-10-032-658-11 | Sequence 11, App1 |
| 2 | 603 | 90.8 | 124 9 US-10-032-658-17 | Sequence 17, App1 |
| 3 | 599 | 90.2 | 112 9 US-10-032-658-13 | Sequence 13, App1 |
| 4 | 599 | 90.2 | 124 9 US-10-032-658-19 | Sequence 19, App1 |
| 5 | 487 | 73.3 | 148 9 US-10-032-658-15 | Sequence 15, App1 |
| 6 | 184 | 27.7 | 2164 9 US-10-123-155-151 | Sequence 151, App |
| 7 | 182.5 | 27.5 | 2380 9 US-10-184-644-597 | Sequence 597, App |
| 8 | 182.5 | 27.5 | 2380 9 US-10-184-644-597 | Sequence 597, App |
| 9 | 180 | 27.1 | 756 9 US-10-123-155-171 | Sequence 171, App |
| 10 | 178.5 | 26.9 | 3819 9 US-10-123-155-171 | Sequence 171, App |
| 11 | 177 | 26.7 | 2690 9 US-10-184-644-405 | Sequence 405, App |
| 12 | 177 | 26.7 | 2690 9 US-10-184-644-405 | Sequence 405, App |
| 13 | 176 | 26.5 | 702 9 US-10-123-155-193 | Sequence 193, App |
| 14 | 174.5 | 26.3 | 1675 9 US-10-123-155-135 | Sequence 135, App |
| 15 | 174.5 | 26.3 | 2300 9 US-10-184-644-115 | Sequence 115, App |
| 16 | 174.5 | 26.3 | 2300 9 US-10-184-644-115 | Sequence 115, App |
| 17 | 173 | 26.1 | 1024 9 US-10-184-644-543 | Sequence 543, App |
| 18 | 173 | 26.1 | 1024 9 US-10-184-644-543 | Sequence 543, App |
| 19 | 172.5 | 26.0 | 1997 9 US-10-184-644-529 | Sequence 529, App |

| | | | | |
|----|-------|------|---------------------------|--------------------|
| 20 | 172.5 | 26.0 | 1997 9 US-10-184-634-529 | Sequence 529, App |
| 21 | 172 | 25.9 | 3089 9 US-10-184-644-61 | Sequence 61, App1 |
| 22 | 172 | 25.9 | 3089 9 US-10-184-634-61 | Sequence 61, App1 |
| 23 | 171.5 | 25.8 | 1901 9 US-10-184-644-47 | Sequence 47, App1 |
| 24 | 171.5 | 25.8 | 1901 9 US-10-184-644-47 | Sequence 47, App1 |
| 25 | 171 | 25.8 | 1073 9 US-10-184-644-305 | Sequence 305, App |
| 26 | 171 | 25.8 | 1073 9 US-10-184-644-305 | Sequence 305, App |
| 27 | 171 | 25.8 | 1904 9 US-10-123-155-99 | Sequence 99, App1 |
| 28 | 171 | 25.8 | 3046 9 US-09-759-1308-441 | Sequence 441, App1 |
| 29 | 170.5 | 25.7 | 972 9 US-10-184-644-443 | Sequence 443, App |
| 30 | 170.5 | 25.7 | 972 9 US-10-184-644-443 | Sequence 443, App |
| 31 | 170.5 | 25.7 | 2401 9 US-10-184-644-205 | Sequence 205, App |
| 32 | 170.5 | 25.7 | 2401 9 US-10-184-644-205 | Sequence 205, App |
| 33 | 170 | 25.6 | 1820 9 US-10-184-644-497 | Sequence 497, App |
| 34 | 170 | 25.6 | 1820 9 US-10-184-644-497 | Sequence 497, App |
| 35 | 170 | 25.6 | 2340 9 US-10-184-644-333 | Sequence 333, App |
| 36 | 170 | 25.6 | 2340 9 US-10-184-644-333 | Sequence 333, App |
| 37 | 169.5 | 25.5 | 1567 9 US-10-123-155-215 | Sequence 215, App |
| 38 | 169.5 | 25.5 | 1567 9 US-10-123-155-215 | Sequence 215, App |
| 39 | 169 | 25.5 | 1200 9 US-09-826-508-3 | Sequence 3, App1 |
| 40 | 169 | 25.5 | 2476 9 US-10-184-644-585 | Sequence 585, App1 |
| 41 | 169 | 25.5 | 2476 9 US-10-184-644-585 | Sequence 585, App1 |
| 42 | 169 | 25.5 | 3296 9 US-10-123-155-369 | Sequence 369, App |
| 43 | 168.5 | 25.4 | 1319 9 US-10-123-155-241 | Sequence 241, App |
| 44 | 168 | 25.3 | 1871 9 US-10-184-644-301 | Sequence 301, App |
| 45 | 168 | 25.3 | 1871 9 US-10-184-644-301 | Sequence 301, App |

ALIGNMENTS

RESULT 1
US-10-032-658-11
Sequence 11, Application US/10032658
Patent No. US20020165383A1
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
Liou, Yih-Cheng
Walker, Virginia K.
Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/032,658
FILING DATE: 02-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear


```

; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
; OS-10-123-135-151

```

| | | | | |
|--------------------------|--------|--------------------|------------|--------------|
| Query Match | 27.7%; | Score 184; | DB 9; | Length 2164; |
| Best Local Similarity | 38.0%; | Pred. No. 6.1e-07; | | |
| Matches 38; Conservative | 4; | Mismatches 42; | Inbels 16; | Gaps 4; |

QY 21 CLETCYCHCTGGADTSCDTACTGCGCNPNAHCT-----DSKNCYKAATCTGST 71
 | | | | | | | | | | | | | | : | | | | :
 Db 749 CCGAACCCACTGGAGCTCCA-ACTGCACACGAGATCCCGCAGAGAGAGTCCAGCTCTGAC 807

```

0y      72 KONTARCTNSDCEFEARTCTBDSINCYATACTACINSTGPG 111
          | | | | | | | | | | | | | | | | | | | |
Db      808 -CACACAC-----CCACTTCACATGCCACAGCGTGAGCCAG 841

```

RESULT 7
US-10-184-644-597

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ORGANISM: Homo sapiens
OS-10-184-644-597
LENGTH: 2380
TYPE: DNA
ORGANISM: Homo Sapien
OS-10-184-644-597

```

| | | | | |
|--------------------------|--------|--------------------|------------|--------------|
| Query Match | 27.5%; | Score 182.5; | DB 9; | Length 2380; |
| Best Local Similarity | 34.3%; | Pred. No. 8.7e-07; | | |
| Matches 37; Conservative | 2; | Mismatches 52; | Indels 17; | Gaps 2 |

Dy 21 CLETCYCHCTGGADCT-SCDIDACTGCGNCPNAHTCTDSKNCVKRATCTG-----69
| | | | | : | | | | : | | |
Db 326 CACTGCCTCCGGGCTCTCTGCGCGCTCTGGACAGTGCATTAICTGCTGCTGGG .385

```

QY      70  -----STKNTARTCTNSKDCFEAKTCTDSTNCKATACCTNSGCG 111
          | | | | | | | | | | | | | | | | | | | | | |
Db      386 GACATCGTGCCTGCTCGGGCCGCTGCTGGCGCTACGACACCTGCAG 433

```

RESULT 8
US-10-184-634-597

Sequence 35/, Application0509/10184932
Publication No. US2003006864A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
Chen, Jlan
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.

```

? APPLICANT: Gurney,Austin L.
? APPLICANT: Pan,James
? APPLICANT: Smith,Victoria
? APPLICANT: Matanabe,Colin K.
? APPLICANT: Wood,William I.
? APPLICANT: Zhang,Zemin
? TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
? FILE REFERENCE: P3430R1C217
? CURRENT APPLICATION NUMBER: US/10/184,634
? CURRENT FILING DATE: 2002-06-28
? Prior Application removed - See File Wrapper or Palm
? NUMBER OF SEQ ID NOS: 612
? SEQ ID NO 597
? LENGTH: 2380
? TYPE: DNA
? ORGANISM: Homo Sapien
? US-10-184-634-597

```

| | | | | |
|--------------------------|--------|--------------------|------------|--------------|
| Query Match | 27.5%; | Score 182.5; | DB 9; | Length 2380; |
| Best Local Similarity | 34.3%; | Pred. No. 8.7e-07; | | |
| Matches 37; Conservative | 2; | Mismatches 52; | Inbels 17; | Gaps 2 |

0y 21 CLCTECYCHCTGGADCT-SCIDACTGCGNCPNAHTCTDSKNVCRAATCTG-----69
| | | | | : | | | | | : | | | |
Db 326 CACTGCCTCCGGGCTCTCCTGCCGCTCTGGAGACAGTACATCTGCTGCTGGG 385

```

QY      70  -----STKCN+TARTCTNSKDFEAKTCTDSTN+CKATAC+TNS+TGCPG 111
          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db      386  GACATCGTCCTGCTCGGGCGCCGTGCTGGCGCTACGACACCTGCAG 433

```

RESULT 9
US-10-123-155-171

Sequence 171, Application 09/10/2003
Publication No. US20030068794A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: Deforge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zhenlin

TITLE OF INVENTION: ACIDS ENCODING THE SAME
 FILE REFERENCE: P3330R1C30
 CURRENT APPLICATION NUMBER: US/10/123,155
 CURRENT FILING DATE: 2002-04-15
 Prior Application removed - See Palm or File Wrapper
 NUMBER OF SEQ ID NOS: 550

```

; LENGTH: 756
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-171

```

| | | | | |
|-----------------------|-----------------|--------------------|------------|-------------|
| Query Match | 27.18; | Score 180; | DB 9; | Length 756; |
| Best Local Similarity | 44.38; | Pred. No. 5.5e-07; | | |
| Matches 43; | Conservative 4; | Mismatches 38; | Indels 12; | Gaps 7; |

QY 21 CLCTEYCHTGGADCT--ACTGCNC--PNAHTCIDSKNCVKAAATCGSTKCNF 75
| | | | | | | | | |
| | | : | | | |

Db 65 CCCTCCGCCCTG--CTGGCTGGCCCTGCTGCTGAGGCTCAGCCCTGAGCTGT-CTT 121

QY 76 ARTCTNSKDFEAKTCTD---STNCYATATCTMSTGC 109

Db 122 TCTCCTTGCACACTCTTCTCCCTTTCCTT-CTGGTGC 157

RESULT 10
US-10-123-155-405
; Sequence 405, Application US/10123155
; Publication No. US20030068794A1
; Central Publication

```

? APPLICANT: Baker, Kevin P.
? APPLICANT: Beresini, Maureen
? APPLICANT: DeForge, Laura
? APPLICANT: Desnoyers, Luc
? APPLICANT: Filvaroff, Ellen
? APPLICANT: Gao, Wei-Qiang
? APPLICANT: Gerritsen, Mary E.
? APPLICANT: Goddard, Audrey
? APPLICANT: Godowski, Paul J.
? APPLICANT: Gurney, Austin L.
? APPLICANT: Sherwood, Steven
? APPLICANT: Smith, Victoria
? APPLICANT: Stewart, Timothy A.
? APPLICANT: Tumas, Daniel
? APPLICANT: Watanabe, Colin K
? APPLICANT: Wood, William
? APPLICANT: Zhang, Zemin
? TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
? FILE REFERENCE: P33081C30
? CURRENT APPLICATION NUMBER: US/10/123,155
? PRIOR FILING DATE: 2002-04-15
? PRIOR Application removed - See Palm or File Wrapper
? NUMBER OF SEQ ID NOS: 550
? SEQ ID NO 405
? LENGTH: 3819
? TYPE: DNA
? ORGANISM: Homo Sapien
? OS-10-123-155-405

```

| | | | | |
|--------------|-----------------------|---|-------------------|------------------------|
| | 26.9%; | Score 178.5; | D _B 9, | Length 3819; |
| Query Match: | Best Local Similarity | 36.2%; | Pred. No. | 2.6e-06; |
| Matches | 42; Conservative | 1; | Mismatches | 42; Indels 31; Gaps 6; |
| | | | | |
| QY | 23 | CTECYC-----HGTGADCTSCDACTGC--GNCPNAHCCT---DSKNCVAAATCT-- | 68 | |
| | | | | |
| Db | 2094 | CTTCCTCTTGGCTTTGG-CACCTCCAGGTTTTGTGCTCGCTTAACCTTTTCACCATCAATC | 2151 | |
| | | | | |
| QY | 69 | -----GSTKCNARTCTNSKDCEAKCTIDSTNCKVATACNTSGCPG | 111 | |
| | | | | |
| Db | 2152 | AACCTGCCAAGGCTTCATCTTATCTTGGAAGTAGGTC-AATCGGCTCAG | 2205 | |

RESULT 11
 US-10-184-644-35
 : Sequence 35, Application US/10184644
 : Publication NO. US20030044930A1
 :
 : GENERAL INFORMATION:
 : APPLICANT: Baker, Kevin P.
 : APPLICANT: Chen, Jiah
 : APPLICANT: Desnoyers, Luc
 : APPLICANT: Goddard, Audrey
 : APPLICANT: Godowski, Paul J.
 : APPLICANT: Gurney, Austin L.
 : APPLICANT: Pan, James
 : APPLICANT: Smith, Victoria
 : APPLICANT: Watanabe, Colin K.
 : APPLICANT: Wood, William I.
 : APPLICANT: Zhang, Zhenli
 :
 : TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

```

: FILE REFERENCE: P343ORIC227
: CURRENT APPLICATION NUMBER: US/10/184,644
: CURRENT FILING DATE: 2002-06-28
: Prior Application removed - See File Wrapper or Palm
: NUMBER OF SEQ ID NOS: 612
: SEQ ID NO 35
: LENGTH: 2690
: TYPE: DNA
: ORGANISM: Homo Sapien
: FEATURE:
: NAME/KEY: unsure
: LOCATION: 2039-2065
: OTHER INFORMATION: unknown base
US-10-184-644-35

```

| | | | | |
|-----------------------|--------|--------------------|--------|----------------|
| Query Match | 26.7%; | Score 177; | DB 9; | Length 2690; |
| Best Local Similarity | 35.9%; | Pred. No. 2.6e-06; | | |
| Matches | 42; | Conservative | 1; | Mismatches 44; |
| | | | Indels | 30; |
| | | | Gaps | 5 |

QY 21 CLECEYCHOTGGADT-----SCDAATGC-----GNPMNHTCDNSKNYKKA 65
 Db 1762 CTCCTCCCTCCAAATCCCAACCCCTCTCTCTTTGGGGTCACTGTCTCATTTCTGGGGCTAAA 1821
 QY 66 -----TCTGSTRKNTARTCTNSKDFEAKTCTDSTNYKAACTNS-TCPCG 111
 Db 1822 AGTTTTTGAGACGGCTCAAAATCT---CCCAACCTCTCAGCTGCTGAGTCTCAG 1874

```

RESULT 12
US-10-184-634-35
; Sequence 35, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:

```

```

? APPLICANT: Baker, Kevin P.
? APPLICANT: Chen, Jian
? APPLICANT: Desnoyers, Luc
? APPLICANT: Goddard, Audrey
? APPLICANT: Godowski, Paul J.
? APPLICANT: Gurney, Austin L.
? APPLICANT: Pan, James
? APPLICANT: Smith, Victoria
? APPLICANT: Watanabe, Colin K.
? APPLICANT: Wood, William I.
? APPLICANT: Zhang, Zemin
? TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
? FILE OF INVENTION: ACIDS ENCODING THE SAME
? FILE REFERENCE: P3430R1C217
? CURRENT FILING DATE: 2002-06-28
? Prior Application removed - See File Wrapper or Palm
? SEQ ID NO 35
? LENGTH: 2690
? TYPE: DNA
? ORGANISM: Homo Sapien
? FEATURE:
? NAME/KEY: unsure
? LOCATION: 2039-2065
? OTHER INFORMATION: unknown base
? -IS-10-184-634-35

```

| | | | | |
|-----------------------|-------|--------------------|-------|----------------------------------|
| Query Match | 26.7% | Score 177; | DB 9; | Length 2690; |
| Best Local Similarity | 35.9% | Pred. No. 2,66-06; | | |
| Matches | 42; | Conservative | 1; | Mismatches 44; Indels 30; Gaps 5 |

| | | | | | | | |
|----|------|--|----------------------|---------------------------------|--------|---------------------|------|
| QY | 21 | CCTCEYCHCTGAGDCT | ----- | SCTDACCTGC | ----- | GNCNNAHCTIDSKENYKAA | 65 |
| | | | | | | | |
| Db | 1762 | CTCTTCCTCCAKARCCACAGCCCTCTCTCTTGGGGCTACAGTGTCTCACTTCCTGGGGCTAA | | | | | 1821 |
| | | | | | | | |
| QY | 66 | ----- | TCTGTCNTAATFTGNSKDCE | EAATCTDSTNCTATCACTNS | -TGCPG | | 111 |
| | | | | | | | |
| Db | 1822 | AGTTTGTGAGACTGGGCTCAAAATGCT | ----- | CCCAAGCTCTGCTGACAGTCTTACAGTCCAG | | | 1874 |
| | | | | | | | |

```

      APPLICANT: Wood,William
      TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
      FILE REFERENCE: P3330R1C30
      CURRENT APPLICATION NUMBER: US/10/123,155
      Prior Application removed - See Palm or File Wrapper
      NUMBER OF SEQ ID NOS: 550
      SEQ ID NO 135
      LENGTH: 1675
      TYPE: DNA
      ORGANISM: Homo Sapien
      US-10-123-155-135

Query Match                               26.3%; Score 174.5; DB 9; Length 1675;
Best Local Similarity 39.4%; Pred. No. 2.8e-06;
Matches 37; Conservative 2; Mismatches 48; Indels 7; Gaps 2;

QY 21 CLCTEY---CHCTGADCTCTDCTAGCTGCACGNCPPNHHCTDSKNCVKRATGSGTKKNTNR 77
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 325 CCGGCGGGGGCCATGCATTCATGCCTAGCGCCCGCCGTC---CGCTGCTTCTGCTCT 380

QY 78 TCTNSDCFEAKTCTDSINCKYKATCTSTGCGP 111
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 381 TCCCTTGCTGCTGCTGCTGCTGCTGCTGCTGCG 414

RESULT 15
US-10-184-644-115
Sequence 115, Application US/10184644
Publication No. US20030044930a1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3430R1C227
CURRENT APPLICATION NUMBER: US/10/184,644
CURRENT FILING DATE: 2002-06-28
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 115
LENGTH: 2300
TYPE: DNA
ORGANISM: Homo Sapien
US-10-184-644-115

Query Match                               26.3%; Score 174.5; DB 9; Length 2300;
Best Local Similarity 39.3%; Pred. No. 3.6e-06;
Matches 42; Conservative 1; Mismatches 45; Indels 19; Gaps 5

QY 21 CLCT-ECYCHCTGAD-----CTSCDTACTGC-GNCPNHHCTDSKNCVKRATCTGS 70
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 1058 CCCTGACCCCGAGATCTTAATCCCTACTCTCTGCTGCTCCCTTTAGACATGAGGCTGC 1117

QY 71 TKCTATATCTNSKDCFEAKTCTDSINCKYKATC-----TNSGCGP 111
      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 1118 TACACAGACAGGTCTGGCTC---TGCAGACACAGAGGGTCTCTCG 1161

Search completed: May 16, 2003, 09:19:44
Job time : 34.6842 secs

```

GenCore version 5.1.4.p5.4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 16, 2003, 08:29:25 ; Search time 25.7895 Seconds
(without alignments)
127.780 Million cell updates/sec

Title: US-10-032-658-11

Perfect score: 664

Sequence: 1 MAFTCGFSKRWLVIAIVYM.....DSTNCKYKATACTNSTGCPGH 112

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 segs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep.*
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/1aa/PCUTUS.COMB.pep.*
6: /cgn2_6/ptodata/1/1aa/Dackfilest.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------------|
| 1 | 664 | 100.0 | 112 | 4 | US-08-882-907-11 |
| 2 | 603 | 90.8 | 124 | 4 | US-08-882-907-17 |
| 3 | 599 | 90.2 | 112 | 4 | US-08-882-907-13 |
| 4 | 599 | 90.2 | 124 | 4 | US-08-882-907-19 |
| 5 | 487 | 73.3 | 148 | 4 | US-08-882-907-15 |
| 6 | 377.5 | 56.9 | 108 | 1 | US-08-485-359-2 |
| 7 | 377.5 | 56.9 | 108 | 1 | US-08-485-359-2 |
| 8 | 377.5 | 56.9 | 108 | 5 | PCT-US96-08815-2 |
| 9 | 361 | 54.4 | 109 | 1 | US-08-485-359-4 |
| 10 | 361 | 54.4 | 109 | 1 | US-08-485-359-4 |
| 11 | 361 | 54.4 | 109 | 5 | PCT-US96-08815-4 |
| 12 | 163.5 | 24.6 | 1917 | 4 | US-09-627-650B-5 |
| 13 | 163.5 | 24.6 | 1917 | 4 | US-09-627-650B-5 |
| 14 | 160.5 | 24.2 | 1345 | 2 | US-09-436-063C-5 |
| 15 | 160.5 | 24.2 | 1345 | 2 | US-09-436-063C-5 |
| 16 | 159.5 | 23.7 | 1417 | 3 | US-08-508-761B-22 |
| 17 | 157.5 | 23.0 | 1128 | 4 | US-08-900-230-3 |
| 18 | 157.5 | 23.6 | 1128 | 4 | US-09-627-650B-11 |
| 19 | 157.5 | 23.6 | 1128 | 4 | US-09-436-063C-11 |
| 20 | 157.5 | 23.6 | 1652 | 4 | US-09-627-650B-1 |
| 21 | 157.5 | 23.6 | 1652 | 4 | US-09-627-650B-1 |
| 22 | 157.5 | 23.6 | 1508 | 4 | US-09-436-063C-1 |
| 23 | 157.5 | 23.6 | 2508 | 4 | US-09-627-650B-7 |
| 24 | 157.5 | 23.6 | 2544 | 4 | US-09-436-063C-7 |
| 25 | 157.5 | 23.6 | 2544 | 4 | US-09-627-650B-3 |
| 26 | 157.5 | 23.6 | 2601 | 4 | US-09-436-063C-3 |
| 27 | 157.5 | 23.6 | 2601 | 4 | US-09-627-650B-9 |

| | | | | | | |
|----|-------|------|------|---|-------------------|-------------------|
| 28 | 141.5 | 21.3 | 2088 | 4 | US-09-548-372D-13 | Sequence 13, Appl |
| 29 | 141.5 | 21.3 | 2088 | 4 | US-09-548-367D-13 | Sequence 13, Appl |
| 30 | 139 | 20.9 | 1801 | 4 | US-08-630-915A-37 | Sequence 37, Appl |
| 31 | 130.5 | 19.7 | 801 | 1 | US-07-906-349A-6 | Sequence 6, Appl |
| 32 | 124 | 18.7 | 24 | 4 | US-08-882-907-4 | Sequence 4, Appl |
| 33 | 117 | 17.6 | 143 | 4 | US-08-990-823-112 | Sequence 112, App |
| 34 | 115.5 | 17.4 | 102 | 3 | US-08-974-022-53 | Sequence 53, Appl |
| 35 | 115.5 | 17.4 | 102 | 4 | US-08-795-445A-53 | Sequence 53, Appl |
| 36 | 115.5 | 17.4 | 102 | 4 | US-08-795-447A-53 | Sequence 53, Appl |
| 37 | 115.5 | 17.4 | 102 | 4 | US-08-974-186-53 | Sequence 53, Appl |
| 38 | 115.5 | 17.4 | 102 | 4 | US-08-795-446B-53 | Sequence 53, Appl |
| 39 | 114 | 17.2 | 2556 | 1 | US-08-083-590A-20 | Sequence 20, Appl |
| 40 | 114 | 17.2 | 2556 | 3 | US-08-532-384-20 | Sequence 20, Appl |
| 41 | 113 | 17.0 | 341 | 2 | US-08-209-521-11 | Sequence 11, Appl |
| 42 | 113 | 17.0 | 2523 | 1 | US-08-185-432-18 | Sequence 18, Appl |
| 43 | 113 | 17.0 | 2523 | 1 | US-08-899-232-3 | Sequence 3, Appl |
| 44 | 112 | 16.9 | 2556 | 1 | US-08-185-432-17 | Sequence 17, Appl |
| 45 | 112 | 16.9 | 2556 | 4 | US-08-899-232-2 | Sequence 2, Appl |

ALIGNMENTS

```
RESULT 1
US-08-882-907-11
: Sequence 11, Application US/08882907
: Patent No. 6392024
:
: GENERAL INFORMATION:
: APPLICANT: Graham, Laurie A.
: APPLICANT: Llou, Yih-Cheng
: APPLICANT: Walker, Virginia K.
: APPLICANT: Davies, Peter L.
: TITLE OF INVENTION: Tenebrio Antifreeze Proteins
: NUMBER OF SEQUENCES: 22
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Townsend and Townsend and Crew LLP
: STREET: Two Embarcadero Center, Eighth Floor
: CITY: San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94111-3834
:
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
:
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/882,907
: FILING DATE: 26-JUN-1997
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Weber, Kenneth A.
: REGISTRATION NUMBER: 31,677
: REFERENCE/DOCKET NUMBER: 016252-002100US
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 576-0200
: TELEFAX: (415) 576-0300
: INFORMATION FOR SEQ ID NO: 11:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 112 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-882-907-11
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Query Match 100.0%; Score 664; DB 4; Length 112;
Best Local Similarity 100.0%; Pred. No. 3.3e-52;
Matches 112; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAFTCGFSKRWLVIAIVYMCCTECYCHCTGAGDCTSCDTACTGCGNCPNATCTDSKN 60
DB 1 MAFTCGFSKRWLVIAIVYMCCTECYCHCTGAGDCTSCDTACTGCGNCPNATCTDSKN 60

QY 61 CVKATCTGCTNTARTCTNSKDCFEAKTCTDSTNCKYKATACNSTGCPGH 112
|||||
Db 61 CVKATCTGCTNTARTCTNSKDCFEAKTCTDSTNCKYKATACNSTGCPGH 112

RESULT 2

US-08-882-907-17
; Sequence 17, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenobrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-17

Query Match 90.8%; Score 603; DB 4; Length 124;
Best Local Similarity 83.9%; Pred. No. 8.9e-47;
Matches 104; Conservative 2; Mismatches 6; Indels 12; Gaps 1;

QY 1 MAFKTCGFSKRWLVIAIVMCLCTECYCHCTGGADCTCTDAGTGGCNCPPAHTCTDSK- 59
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Db 1 MAFKTCGFSKRWLVIAIVMCLCTECYCHCTGGADCTCTDAGTGGCNCPPAHTCTDSKN 60
QY 60 -----NCYKATCTGCTNTARTCTNSKDCFEAKTCTDSTNCKYKATACNSTG 108
|||||
Db 61 CVRAETCTDSENCYKATCTGSRNCNTAMCTNSKDCFEAKTCTDSTNCKYKATACNSTG 120
QY 109 CPGH 112
|||||
Db 121 CPGH 124

RESULT 3

US-08-882-907-13
; Sequence 13, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.

; TITLE OF INVENTION: Tenobrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-13

Query Match 90.2%; Score 599; DB 4; Length 112;
Best Local Similarity 90.2%; Pred. No. 1.8e-46;
Matches 101; Conservative 5; Mismatches 6; Indels 0; Gaps 0;

QY 1 MAFKTCGFSKRWLVIAIVMCLCTECYCHCTGGADCTCTDAGTGGCNCPPAHTCTDSKN 60
|||||
Db 1 MAFKTCGFSKRWLVIAIVMCLCTECYCHCTGGADCTCTDAGTGGCNCPPAHTCTDSKH 60
QY 61 CVKATCTGCTNTARTCTNSKDCFEAKTCTDSTNCKYKATACNSTGCPGH 112
|||||
Db 61 CVKATCTGCTNTARTCTNSKDCFEAKTCTDSTNCKYKATACNSTGCPGH 112

RESULT 4

US-08-882-907-19
; Sequence 19, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenobrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435

RESULT 7
US-08-569-594-2
Sequence 2, Application US/08569594
Patent No. 5633451
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Barnes & Thornburg
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,594
FILING DATE:
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-25377
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
US-08-569-594-2
Query Match 56.9%; Score 377.5; DB 1; Length 108;
Best local similarity 64.6%; Pred. No. 6.6e-27;
Matches 64; Conservative 13; Mismatches 21; Indels 1; Gaps 1;
QY 13 LVIAIVMLCTECYCHCTGAGDCTCTACTGCGNCPNAAHT-CTDSKNCVAKATCTGCT 71
DB 10 LVISVLMVCHCTGCTGGSDCRSCVCTDQNCNPAACTACTSSNCINALLCTDSY 69
QY 72 KCMATCTNSKDCFEAKTCTDSTNCTKATCTNSTGCP 110
DB 70 DCHNAETCTSTNCTKAKTCTGCTGTCYCATCTDSTGCP 108
RESULT 8
PCT-US96-08815-2
Sequence 2, Application PC/TUS9608815
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDES ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Barnes & Thornburg
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA

ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/08815
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-27026
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
PCT-US96-08815-2
Query Match 56.9%; Score 377.5; DB 5; Length 108;
Best local similarity 64.6%; Pred. No. 6.6e-27;
Matches 64; Conservative 13; Mismatches 21; Indels 1; Gaps 1;
QY 13 LVIAIVMLCTECYCHCTGAGDCTCTACTGCGNCPNAAHT-CTDSKNCVAKATCTGCT 71
DB 10 LVISVLMVCHCTGCTGGSDCRSCVCTDQNCNPAACTACTSSNCINALLCTDSY 69
QY 72 KCMATCTNSKDCFEAKTCTDSTNCTKATCTNSTGCP 110
DB 70 DCHNAETCTSTNCTKAKTCTGCTGTCYCATCTDSTGCP 108
RESULT 9
US-08-485-359-4
Sequence 4, Application US/08485359
Patent No. 5627051
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Barnes & Thornburg
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,359
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-25377
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258

;; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
;; FILE REFERENCE: 21101.000903
;; CURRENT APPLICATION NUMBER: US/09/627,650B
;; CURRENT FILING DATE: 2000-07-28
;; PRIOR APPLICATION NUMBER: 09/436,063
;; PRIOR FILING DATE: 1999-11-08
;; PRIOR APPLICATION NUMBER: 60/107,727
;; PRIOR FILING DATE: 1998-11-09
;; NUMBER OF SEQ ID NOS: 50
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 5
;; LENGTH: 1917
;; TYPE: PRF
;; ORGANISM: Caenorhabditis elegans
US-09-627-650B-5

Query Match 24.6%; Score 163.5; DB 4; Length 1917;
Best Local Similarity 30.9%; Pred. No. 7e-07;
Matches 38; Conservative 6; Mismatches 42; Indels 37; Gaps 5;

QY 21 CLCTECC-----HCTGACCTCTDCTGCGCNPNAHTCTDSKNCVK----- 63
DB 1676 CTCTCAACGTCGCTACTGGCTTCCTCATCCGCGACAGCATTCAGAGAGCAA 1735
QY 64 -----AATCTGCTKCN---TARTCTNSK-----DCEFAKTCCTDSTNCKYKATCTNS 106
DB 1736 CGGACAGCTAAATTCCTTAATTCGATCAGACACACTCTCATCTCATTC---TATTGT 1792
QY 107 TGC 109
DB 1793 AGC 1795

RESULT 13
US-09-436-063C-5
; Sequence 5, Application US/09436063C
; Patent No. 6407210
; GENERAL INFORMATION:
; APPLICANT: Bamber, Bruce
; APPLICANT: Jorgensen, Erik
; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
; FILE REFERENCE: P-1095corrected
; CURRENT APPLICATION NUMBER: US/09/436,063C
; CURRENT FILING DATE: 1999-11-08
; PRIOR APPLICATION NUMBER: 60/107727
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 1917
; TYPE: PRF
; ORGANISM: Caenorhabditis elegans
US-09-436-063C-5

Query Match 24.6%; Score 163.5; DB 4; Length 1917;
Best Local Similarity 30.9%; Pred. No. 7e-07;
Matches 38; Conservative 6; Mismatches 42; Indels 37; Gaps 5;

QY 21 CLCTECC-----HCTGACCTCTDCTGCGCNPNAHTCTDSKNCVK----- 63
DB 1676 CTCTCAACGTCGCTACTGGCTTCCTCATCCGCGACAGCATTCAGAGAGCAA 1735
QY 64 -----AATCTGCTKCN---TARTCTNSK-----DCEFAKTCCTDSTNCKYKATCTNS 106
DB 1736 CGGACAGCTAAATTCCTTAATTCGATCAGACACACTCTCATCTCATTC---TATTGT 1792
QY 107 TGC 109
DB 1793 AGC 1795

RESULT 14
US-08-977-767-3
; Sequence 3, Application US/08977767
; Patent No. 5972684
; GENERAL INFORMATION:
; APPLICANT: Bandman, Olga
; APPLICANT: Yue, Henry
; APPLICANT: Greenwald, Sara
; APPLICANT: Corley, Neil C.
; TITLE OF INVENTION: CARBONIC ANHYDRASE VIII
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/977,767
; FILING DATE: Herewith
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0423 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-855-0555
; TELEFAX: 650-845-4166
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1345 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: GenBank
; CLONE: 1532042
US-08-977-767-3

Query Match 24.2%; Score 160.5; DB 2; Length 1345;
Best Local Similarity 38.3%; Pred. No. 9.4e-07;
Matches 41; Conservative 2; Mismatches 45; Indels 19; Gaps 6;

QY 16 AVIYMCCTEYCHCTGAGDCTSC--TDACTGCGCNPNAHTCTDSKNCYKAA---TCTGS 70
DB 1012 AATATCACCTCCCTCCAG--CTGCATTCCTCCGCACT---TCTGAGCCAGAAATCTCCGG 1066
QY 71 TKCNARTCTNSKDCFEAKTCCTDSTNCKYKAT-----ACTNSTGCPG 111
DB 1067 GTCCAGTCTT---CCAGAGCTCAGCCGTAAAGCGCCGCCCTGACAG 1110

RESULT 15
US-09-738-884-1
; Sequence 1, Application US/09738884
; Patent No. 6391606
; GENERAL INFORMATION:
; APPLICANT: GUEGLER, Karl et al
; TITLE OF INVENTION: ISOLATED HUMAN PHOSPHOLIPASE PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHOLIPASE
; FILE REFERENCE: C1000849
; CURRENT APPLICATION NUMBER: US/09/738,884

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; CURRENT FILING DATE: 2000-12-18
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2211
; TYPE: PRT
; ORGANISM: Human
US-09-738-884-1
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Query Match      24.1%; Score 160; DB 4; Length 2211;
Best Local Similarity 39.6%; Pred. No. 1.6e-06;
Matches 36; Conservative 0; Mismatches 45; Indels 10; Gaps 4;
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QY 21 CICTECYCHCTGGADCTCTDACTGGCNCNNAHCTDSKNVCYKAATCTGSKNTARTCT 80
Db 1138 CACTGGGGGCTGGAGCAGCAGGCTGC--CATGGCCC--GCCACCTCTGCACCATC--CT 1190
QY 81 NSKDCPEAKTCIDSTNICYKATACNTSTGCPG 111
Db 1191 GGGGGACATGCTGTG--ACACAGGCGGCTG 1218
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Search completed: May 16, 2003, 09:10:26
Job time : 26.7895 secs

GenCore version 5.1.4.p5.4578
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OW protein - protein search, using sw model

Run on: May 16, 2003, 09:00:41 ; Search time 6.78947 Seconds
(without alignments)
340.942 Million cell updates/sec

Title: US-10-032-658-4

Perfect score: 131

Sequence: 1 XGTGXADCTGCTACTGCGXCPNA 24

Scoring table: BIOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 362588 seqs, 96450795 residues

Total number of hits satisfying chosen parameters: 362588

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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2: /cgn2_6/ptodata/1/pubppa/PC1_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubppa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubppa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubppa/US07_NEW_PUB.pep.*
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10: /cgn2_6/ptodata/1/pubppa/US09_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubppa/US10_NEW_PUB.pep.*
12: /cgn2_6/ptodata/1/pubppa/US10_PUBCOMB.pep.*
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14: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|-------------------|-------------------|
| 1 | 126 | 96.2 | 124 | US-10-032-658-17 | Sequence 17, App1 |
| 2 | 126 | 96.2 | 124 | US-10-032-658-19 | Sequence 19, App1 |
| 3 | 126 | 96.2 | 148 | US-10-032-658-15 | Sequence 15, App1 |
| 4 | 124 | 94.7 | 24 | US-10-032-658-4 | Sequence 4, App1 |
| 5 | 124 | 94.7 | 112 | US-10-032-658-11 | Sequence 11, App1 |
| 6 | 124 | 94.7 | 112 | US-10-032-658-13 | Sequence 13, App1 |
| 7 | 83 | 63.4 | 1750 | US-10-184-644-397 | Sequence 397, App |
| 8 | 83 | 63.4 | 1750 | US-10-123-155-187 | Sequence 187, App |
| 9 | 83 | 63.4 | 1750 | US-10-184-634-397 | Sequence 397, App |
| 10 | 82.5 | 63.0 | 4842 | US-10-184-644-289 | Sequence 289, App |
| 11 | 82.5 | 63.0 | 4842 | US-10-184-634-289 | Sequence 289, App |
| 12 | 80 | 61.1 | 2272 | US-10-184-644-345 | Sequence 345, App |
| 13 | 80 | 61.1 | 2272 | US-10-184-634-345 | Sequence 345, App |
| 14 | 80 | 61.1 | 3721 | US-10-123-155-543 | Sequence 543, App |
| 15 | 78.5 | 59.9 | 1312 | US-10-123-155-397 | Sequence 397, App |
| 16 | 78 | 59.5 | 647 | US-10-184-644-539 | Sequence 539, App |
| 17 | 78 | 59.5 | 647 | US-10-184-634-539 | Sequence 539, App |
| 18 | 78 | 59.5 | 1319 | US-10-123-155-241 | Sequence 241, App |
| 19 | 78 | 59.5 | 2167 | US-10-123-155-159 | Sequence 159, App |

| | | | | | | |
|----|------|------|------|---|-------------------|-------------------|
| 20 | 78 | 59.5 | 3296 | 9 | US-10-123-155-369 | Sequence 369, App |
| 21 | 77.5 | 59.2 | 1661 | 9 | US-10-184-644-229 | Sequence 229, App |
| 22 | 77.5 | 59.2 | 1661 | 9 | US-10-123-155-223 | Sequence 223, App |
| 23 | 77.5 | 59.2 | 1661 | 9 | US-10-184-634-223 | Sequence 223, App |
| 24 | 77.5 | 59.2 | 2479 | 9 | US-10-123-155-349 | Sequence 349, App |
| 25 | 77.5 | 59.2 | 1371 | 9 | US-10-184-644-143 | Sequence 143, App |
| 26 | 77 | 58.8 | 1371 | 9 | US-10-184-634-143 | Sequence 143, App |
| 27 | 77 | 58.8 | 1675 | 9 | US-10-123-155-135 | Sequence 135, App |
| 28 | 77 | 58.8 | 1613 | 9 | US-10-123-155-337 | Sequence 337, App |
| 29 | 77 | 58.8 | 2973 | 9 | US-10-184-644-583 | Sequence 583, App |
| 30 | 77 | 58.8 | 2973 | 9 | US-10-184-634-583 | Sequence 583, App |
| 31 | 76.5 | 58.4 | 1364 | 9 | US-10-123-155-295 | Sequence 295, App |
| 32 | 76.5 | 58.4 | 1410 | 9 | US-10-184-644-123 | Sequence 123, App |
| 33 | 76.5 | 58.4 | 1410 | 9 | US-10-184-634-123 | Sequence 123, App |
| 34 | 76.5 | 58.4 | 1971 | 9 | US-10-123-155-139 | Sequence 139, App |
| 35 | 76.5 | 58.4 | 2164 | 9 | US-10-123-155-151 | Sequence 151, App |
| 36 | 76.5 | 58.4 | 2340 | 9 | US-10-184-644-333 | Sequence 333, App |
| 37 | 76.5 | 58.4 | 2340 | 9 | US-10-184-634-333 | Sequence 333, App |
| 38 | 76 | 58.0 | 999 | 9 | US-10-123-155-395 | Sequence 395, App |
| 39 | 76 | 58.0 | 1114 | 9 | US-10-184-644-271 | Sequence 271, App |
| 40 | 76 | 58.0 | 1114 | 9 | US-10-184-634-271 | Sequence 271, App |
| 41 | 76 | 58.0 | 2150 | 9 | US-10-123-155-189 | Sequence 189, App |
| 42 | 76 | 58.0 | 2379 | 9 | US-10-123-155-535 | Sequence 535, App |
| 43 | 75.5 | 57.6 | 1328 | 9 | US-10-123-155-157 | Sequence 157, App |
| 44 | 75 | 57.3 | 1257 | 9 | US-10-184-644-365 | Sequence 365, App |
| 45 | 75 | 57.3 | 1257 | 9 | US-10-184-634-365 | Sequence 365, App |

ALIGNMENTS

RESULT 1
US-10-032-658-17
; Sequence 17, Application US/10032658
; Patent No. US20020165383A1
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; ; Liou, Yih-Cheng
; ; Walker, Virginia K.
; ; Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/032,658
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 010252-002100DS
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-10-032-658-17

Query Match 96.2%; Score 126; DB 9; Length 124;
Best Local Similarity 87.0%; Pred. No. 4,6e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGAXDCTCTXACTGCGXCPNA 24
DB 30 CTGADCTCTACTGCGSCPNA 52

RESULT 2
US-10-032-658-19
Sequence 19, Application US/10032658
Patent No. US20020165383A1
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
Liou, Yih-Cherng
Walker, Virginia K.
Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/032,658
FILING DATE: 02-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-10-032-658-19

Query Match 96.2%; Score 126; DB 9; Length 124;
Best Local Similarity 87.0%; Pred. No. 4,6e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGAXDCTCTXACTGCGXCPNA 24
DB 30 CTGADCTCTACTGCGSCPNA 52

RESULT 3
US-10-032-658-15
Sequence 15, Application US/10032658
Patent No. US20020165383A1
GENERAL INFORMATION:

APPLICANT: Graham, Laurie A.
Liou, Yih-Cherng
Walker, Virginia K.
Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/032,658
FILING DATE: 02-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 148 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-10-032-658-15

Query Match 96.2%; Score 126; DB 9; Length 148;
Best Local Similarity 87.0%; Pred. No. 5,3e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGAXDCTCTXACTGCGXCPNA 24
DB 30 CTGADCTCTACTGCGSCPNA 52

RESULT 4
US-10-032-658-4
Sequence 4, Application US/10032658
Patent No. US20020165383A1
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
Liou, Yih-Cherng
Walker, Virginia K.
Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.30

;;
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/10/032, 658
;; FILING DATE: 02-Jan-2002
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US/08/882, 907
;; FILING DATE: 26-JUN-1997
;;
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Weber, Kenneth A.
;; REGISTRATION NUMBER: 31,677
;; REFERENCE/DOCKET NUMBER: 016252-002100US
;;
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (415) 576-0200
;; TELEFAX: (415) 576-0300
;;
;; INFORMATION FOR SEQ ID NO: 4:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 24 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: <unknown>
;; TOPOLOGY: linear
;;
;; MOLECULE TYPE: peptide
;;
;; FEATURE:
;; NAME/KEY: Peptide
;; LOCATION: 1..24
;; OTHER INFORMATION: /note= "N-terminal amino acid sequence
;; of YL-1, YL-2, YL-3 and YL-4"
;;
;; FEATURE:
;; NAME/KEY: Modified-site
;; LOCATION: 1
;; OTHER INFORMATION: /product= "OTHER"
;; /note= "Xaa = Gln or His"
;;
;; FEATURE:
;; NAME/KEY: Modified-site
;; LOCATION: 5
;; OTHER INFORMATION: /product= "OTHER"
;; /note= "Xaa = Ala or Gly"
;;
;; FEATURE:
;; NAME/KEY: Modified-site
;; LOCATION: 13
;; OTHER INFORMATION: /product= "OTHER"
;; /note= "Xaa = Ala, Asp or Gly"
;;
;; FEATURE:
;; NAME/KEY: Modified-site
;; LOCATION: 20
;; OTHER INFORMATION: /product= "OTHER"
;; /note= "Xaa = Asn or Ser"
;;
;; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
;; US-10-032-658-4
;;
Query Match 94.7%; Score 124; DB 9; Length 24;
Best Local Similarity 100.0%; Pred. No. 2, 1e-08;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CTGADCTCTACTGCGXCPNA 24
Db 2 CTGADCTCTACTGCGXCPNA 24

;;
;; RESULT 5
;; US-10-032-658-11
;; Sequence 11, Application US/10032658
;; Patent No. US20020165383A1
;; GENERAL INFORMATION:
;; APPLICANT: Graham, Laurie A.
;; Liou, Yih-Cherng
;; Walker, Virginia K.
;; Davies, Peter L.
;; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
;; NUMBER OF SEQUENCES: 22
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Townsend and Townsend and Crew LLP
;; STREET: Two Embarcadero Center, Eighth Floor
;; CITY: San Francisco

;;
;; STATE: California
;; COUNTRY: USA
;; ZIP: 94111-3834
;;
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;;
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/10/032, 658
;; FILING DATE: 02-Jan-2002
;; CLASSIFICATION: <unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US/08/882, 907
;; FILING DATE: 26-JUN-1997
;;
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Weber, Kenneth A.
;; REGISTRATION NUMBER: 31,677
;; REFERENCE/DOCKET NUMBER: 016252-002100US
;;
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (415) 576-0200
;; TELEFAX: (415) 576-0300
;;
;; INFORMATION FOR SEQ ID NO: 11:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 112 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;;
;; SEQUENCE DESCRIPTION: SEQ ID NO: 11:
;; US-10-032-658-11

Query Match 94.7%; Score 124; DB 9; Length 112;
Best Local Similarity 87.0%; Pred. No. 7, 3e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGADCTCTACTGCGXCPNA 24
Db 30 CTGADCTCTACTGCGXCPNA 52

;;
;; RESULT 6
;; US-10-032-658-13
;; Sequence 13, Application US/10032658
;; Patent No. US20020165383A1
;; GENERAL INFORMATION:
;; APPLICANT: Graham, Laurie A.
;; Liou, Yih-Cherng
;; Walker, Virginia K.
;; Davies, Peter L.
;; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
;; NUMBER OF SEQUENCES: 22
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Townsend and Townsend and Crew LLP
;; STREET: Two Embarcadero Center, Eighth Floor
;; CITY: San Francisco
;; STATE: California
;; COUNTRY: USA
;; ZIP: 94111-3834
;;
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;;
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/10/032, 658
;; FILING DATE: 02-Jan-2002
;; CLASSIFICATION: <unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US/08/882, 907
;; FILING DATE: 26-JUN-1997
;;
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Weber, Kenneth A.
;; REGISTRATION NUMBER: 31,677

```

; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-10-032-658-13

Query Match          94.7%; Score 124; DB 9; Length 112;
Best Local Similarity 87.0%; Pred. No. 7.3e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGXADCTCTGACTGCGCPNA 24
   ||| ||||| ||||| ||||
Db 30 CTGADCTCTGACTGCGNCPNA 52

RESULT 7
US-10-184-644-397
; Sequence 397, Application US/10184644
; Publication No. US20030044930A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C227
; CURRENT APPLICATION NUMBER: US/10/184,644
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 397
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-644-397

Query Match          63.4%; Score 83; DB 9; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.035;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTGACTGCG 19
   ||| ||||| ||||| ||||
Db 264 CTGAACCTCTGACTGACG 281

RESULT 8
US-10-123-155-187
; Sequence 187, Application US/10123155
; Publication No. US20030068794A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
```

```

; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C30
; CURRENT APPLICATION NUMBER: US/10/123,155
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 187
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-187

Query Match          63.4%; Score 83; DB 9; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.035;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTGACTGCG 19
   ||| ||||| ||||| ||||
Db 264 CTGAACCTCTGACTGACG 281

RESULT 9
US-10-184-634-397
; Sequence 397, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 397
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-634-397

Query Match          63.4%; Score 83; DB 9; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.035;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTGACTGCG 19
   ||| ||||| ||||| ||||
Db 264 CTGAACCTCTGACTGACG 281

RESULT 10
US-10-184-644-289
; Sequence 289, Application US/10184644
; Publication No. US20030044930A1
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/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Chen, Jian
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Pan, James
/ APPLICANT: Smith, Victoria
/ APPLICANT: Watanabe, Colin K.
/ APPLICANT: Wood, William I.
/ APPLICANT: Zhang, Zemin
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3430R1C227
/ CURRENT APPLICATION NUMBER: US/10/184,644
/ PRIOR APPLICATION REMOVED - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 612
/ SEQ ID NO 289
/ LENGTH: 4842
/ TYPE: DNA
/ ORGANISM: Homo Sapien
US-10-184-644-289

Query Match 63.0%; Score 82.5; DB 9; Length 4842;
Best Local Similarity 53.6%; Pred. No. 0.09;
Matches 15; Conservative 0; Mismatches 8; Indels 5; Gaps 1;

QY 2 CTGAXDCTCTCTX-----ACTGCGXCPNA 24
DB 404 CTGAAGCAGCTAGAGCAGCTGCGCCTGA 431

RESULT 11
US-10-184-634-289
/ Sequence 289, Application US/10184634
/ Publication No. US20030068684A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Chen, Jian
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Pan, James
/ APPLICANT: Smith, Victoria
/ APPLICANT: Watanabe, Colin K.
/ APPLICANT: Wood, William I.
/ APPLICANT: Zhang, Zemin
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3430R1C217
/ CURRENT APPLICATION NUMBER: US/10/184,634
/ PRIOR APPLICATION REMOVED - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 612
/ SEQ ID NO 289
/ LENGTH: 4842
/ TYPE: DNA
/ ORGANISM: Homo Sapien
US-10-184-634-289

Query Match 63.0%; Score 82.5; DB 9; Length 4842;
Best Local Similarity 53.6%; Pred. No. 0.09;
Matches 15; Conservative 0; Mismatches 8; Indels 5; Gaps 1;

QY 2 CTGAXDCTCTCTX-----ACTGCGXCPNA 24
DB 404 CTGAAGCAGCTAGAGCAGCTGCGCCTGA 431

RESULT 12

US-10-184-644-345
/ Sequence 345, Application US/10184644
/ Publication No. US20030044930A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Chen, Jian
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Pan, James
/ APPLICANT: Smith, Victoria
/ APPLICANT: Watanabe, Colin K.
/ APPLICANT: Wood, William I.
/ APPLICANT: Zhang, Zemin
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3430R1C227
/ CURRENT APPLICATION NUMBER: US/10/184,644
/ PRIOR APPLICATION REMOVED - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 612
/ SEQ ID NO 345
/ LENGTH: 2272
/ TYPE: DNA
/ ORGANISM: Homo Sapien
US-10-184-644-345

Query Match 61.1%; Score 80; DB 9; Length 2272;
Best Local Similarity 60.0%; Pred. No. 0.096;
Matches 12; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTGAXDCTCTCTACTGCGXC 21
DB 25 CTGACAGCCGCTTTCGCGGC 44

RESULT 13
US-10-184-634-345
/ Sequence 345, Application US/10184634
/ Publication No. US20030068684A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Chen, Jian
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Pan, James
/ APPLICANT: Smith, Victoria
/ APPLICANT: Watanabe, Colin K.
/ APPLICANT: Wood, William I.
/ APPLICANT: Zhang, Zemin
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3430R1C217
/ CURRENT APPLICATION NUMBER: US/10/184,634
/ PRIOR APPLICATION REMOVED - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 612
/ SEQ ID NO 345
/ LENGTH: 2272
/ TYPE: DNA
/ ORGANISM: Homo Sapien
US-10-184-634-345

Query Match 61.1%; Score 80; DB 9; Length 2272;
Best Local Similarity 60.0%; Pred. No. 0.096;
Matches 12; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTGAXDCTCTCTACTGCGXC 21
DB 25 CTGACAGCCGCTTTCGCGGC 44

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RESULT 14
US-10-123-155-543
; Sequence 543, Application US/10123155
; Publication No. US20030068794A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C30
; CURRENT APPLICATION NUMBER: US/10/123,155
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 543
; LENGTH: 3721
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-543

Query Match      61.1%; Score 80; DB 9; Length 3721;
Best Local Similarity 60.0%; Pred. No. 0.14;
Matches 12; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY      2 CTGXA DCTGCTGCTGCGCGC 21
      111 1 11 1111 1
Db      1013 CTGGCTCGGCTGCTGCGGCC 1032

RESULT 15
US-10-123-155-397
; Sequence 397, Application US/10123155
; Publication No. US20030068794A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C30
; CURRENT APPLICATION NUMBER: US/10/123,155
; CURRENT FILING DATE: 2002-04-15
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; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 397
; LENGTH: 1312
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-397

Query Match      59.9%; Score 78.5; DB 9; Length 1312;
Best Local Similarity 60.9%; Pred. No. 0.092;
Matches 14; Conservative 0; Mismatches 8; Indels 1; Gaps 1;

QY      2 CTGXA DCTGCTGCTGCGCGCPNA 24
      111 11 11111 1 1
Db      84 CTGACTCT-CTTACTGCTGCTGA 105

Search completed: May 16, 2003, 09:19:41
Job time : 9.78947 secs
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GenCore version 5.1.4-P5_4578
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OM protein - protein search, using sw model

Run on: May 16, 2003, 08:29:25 ; Search time 5.52632 Seconds
(Without alignments)
127,780 Million cell updates/sec

Title: US-10-032-658-4

Perfect score: 131
Sequence: 1 XCTGADCTCTACTGCGKCPNA 24

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
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| 1 | 126 | 96.2 | 124 | 4 | US-08-882-907-17 |
| 2 | 126 | 96.2 | 124 | 4 | US-08-882-907-19 |
| 3 | 126 | 96.2 | 148 | 4 | US-08-882-907-15 |
| 4 | 124 | 94.7 | 24 | 4 | US-08-882-907-4 |
| 5 | 124 | 94.7 | 112 | 4 | US-08-882-907-11 |
| 6 | 124 | 94.7 | 112 | 4 | US-08-882-907-13 |
| 7 | 97 | 74.0 | 108 | 1 | US-08-485-359-2 |
| 8 | 97 | 74.0 | 108 | 1 | US-08-559-594-2 |
| 9 | 97 | 74.0 | 108 | 5 | PCT-US96-08815-2 |
| 10 | 97 | 74.0 | 109 | 1 | US-08-485-359-4 |
| 11 | 97 | 74.0 | 109 | 1 | US-08-569-594-4 |
| 12 | 97 | 74.0 | 109 | 5 | PCT-US96-08815-4 |
| 13 | 73.5 | 56.1 | 2211 | 4 | US-09-738-884-1 |
| 14 | 73 | 55.7 | 1917 | 4 | US-09-627-6508-5 |
| 15 | 73 | 55.7 | 1917 | 4 | US-09-627-6508-7 |
| 16 | 71 | 54.2 | 1345 | 2 | US-09-456-063C-5 |
| 17 | 70.5 | 53.8 | 120 | 3 | US-08-977-767-3 |
| 18 | 68.5 | 52.3 | 45 | 4 | US-08-508-7618-22 |
| 19 | 68.5 | 52.3 | 2088 | 4 | US-08-900-230-14 |
| 20 | 68.5 | 52.3 | 2088 | 4 | US-09-548-372D-13 |
| 21 | 67.5 | 51.5 | 1652 | 4 | US-09-627-6508-13 |
| 22 | 67.5 | 51.5 | 1652 | 4 | US-09-627-6508-1 |
| 23 | 67.5 | 51.5 | 2508 | 4 | US-09-436-063C-1 |
| 24 | 67.5 | 51.5 | 2508 | 4 | US-09-627-6508-7 |
| 25 | 67.5 | 51.5 | 2544 | 4 | US-09-436-063C-7 |
| 26 | 67.5 | 51.5 | 2544 | 4 | US-09-627-6508-3 |
| 27 | 67.5 | 51.5 | 2601 | 4 | US-09-436-063C-3 |

| | | | | | | |
|----|------|------|------|---|-------------------|--------------------|
| 28 | 67.5 | 51.5 | 2601 | 4 | US-09-436-063C-9 | Sequence 9, Appl1 |
| 29 | 67 | 51.1 | 1128 | 4 | US-09-627-6508-11 | Sequence 11, Appl1 |
| 30 | 67 | 51.1 | 1128 | 4 | US-09-436-063C-11 | Sequence 11, Appl1 |
| 31 | 66.5 | 50.8 | 801 | 1 | US-07-906-349A-6 | Sequence 6, Appl1 |
| 32 | 66.5 | 50.8 | 1400 | 4 | US-08-630-915A-37 | Sequence 37, Appl1 |
| 33 | 65.5 | 50.0 | 1417 | 4 | US-08-900-230-3 | Sequence 3, Appl1 |
| 34 | 63.5 | 48.5 | 57 | 1 | US-07-609-716-56 | Sequence 56, Appl1 |
| 35 | 61 | 46.6 | 47 | 3 | US-08-482-0858-91 | Sequence 91, Appl1 |
| 36 | 60 | 45.8 | 45 | 4 | US-08-900-230-17 | Sequence 17, Appl1 |
| 37 | 60 | 45.8 | 50 | 4 | US-08-900-230-8 | Sequence 8, Appl1 |
| 38 | 59.5 | 45.4 | 45 | 4 | US-08-900-230-11 | Sequence 11, Appl1 |
| 39 | 59 | 45.0 | 45 | 4 | US-08-900-230-45 | Sequence 45, Appl1 |
| 40 | 59 | 45.0 | 3788 | 4 | US-09-336-447A-76 | Sequence 76, Appl1 |
| 41 | 58.5 | 44.7 | 50 | 4 | US-08-900-230-58 | Sequence 58, Appl1 |
| 42 | 58.5 | 44.7 | 54 | 1 | US-08-279-0588-24 | Sequence 24, Appl1 |
| 43 | 58.5 | 44.7 | 54 | 4 | US-08-828-323-24 | Sequence 24, Appl1 |
| 44 | 58.5 | 44.7 | 102 | 3 | US-08-974-022-53 | Sequence 53, Appl1 |
| 45 | 58.5 | 44.7 | 102 | 4 | US-08-795-445A-53 | Sequence 53, Appl1 |

ALIGNMENTS

RESULT 1
US-08-882-907-17

Sequence 17, Application US/08882907
Patent No. 6392024

GENERAL INFORMATION:

APPLICANT: Graham, Laurie A.

APPLICANT: Liou, Yih-Cheng

APPLICANT: Walker, Virginia K.

APPLICANT: Davies, Peter L.

TITLE OF INVENTION: Tenebrio Antifreeze Proteins

NUMBER OF SEQUENCES: 22

CORRESPONDENCE ADDRESSES:

ADDRESSER: Townsend and Townsend and Crew LLP

City: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/882,907

FILING DATE: 26-JUN-1997

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Weber, Kenneth A.

REGISTRATION NUMBER: 31,677

REFERENCE/DOCKET NUMBER: 016252-002100US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:

LENGTH: 124 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-882-907-17

Query Match 96.2%; Score 126; DB 4; Length 124;
Best Local Similarity 87.0%; Pred. No. 1e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTTGADCTCTACTGCGKCPNA 24
DB 30 CTTGADCTCTACTGCGKCPNA 52

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RESULT 2
US-08-882-907-19
; Sequence 19, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-882-907-19

Query Match          96.2%; Score 126; DB 4; Length 124;
Best Local Similarity 87.0%; Pred. No. 1e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGACDCTCTACTGCGCPCNA 24
DB 30 CTGACDCTCTACTGCGCPCNA 52

RESULT 3
US-08-882-907-15
; Sequence 15, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 148 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-882-907-15

Query Match          96.2%; Score 126; DB 4; Length 148;
Best Local Similarity 87.0%; Pred. No. 1.2e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGACDCTCTACTGCGCPCNA 24
DB 30 CTGACDCTCTACTGCGCPCNA 52

RESULT 4
US-08-882-907-4
; Sequence 4, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cheng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide
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LOCATION: 1..24
OTHER INFORMATION: /note= "N-terminal amino acid sequence
OTHER INFORMATION: of YL-1, YL-2, YL-3 and YL-4"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /note= "Xaa = Gln or His"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 5
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /note= "Xaa = Ala or Gly"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 13
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /note= "Xaa = Ala, Asp or Gly"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 20
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /note= "Xaa = Asn or Ser"
US-08-882-907-4

Query Match 94.7%; Score 124; DB 4; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.4e-09;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2 CTGADCTCTGACTGCGXCPNA 24
DB 2 CTGADCTCTGACTGCGXCPNA 24

RESULT 5
US-08-882-907-11
Sequence 11, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
APPLICANT: Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein
US-08-882-907-11

Query Match 94.7%; Score 124; DB 4; Length 112;
Best Local Similarity 87.0%; Pred. No. 1.6e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2 CTGADCTCTGACTGCGXCPNA 24
DB 30 CTGADCTCTGACTGCGXCPNA 52

RESULT 6
US-08-882-907-13
Sequence 13, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
APPLICANT: Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-882-907-13

Query Match 94.7%; Score 124; DB 4; Length 112;
Best Local Similarity 87.0%; Pred. No. 1.6e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2 CTGADCTCTGACTGCGXCPNA 24
DB 30 CTGADCTCTGACTGCGXCPNA 52

RESULT 7
US-08-485-359-2
Sequence 2, Application US/08485359
Patent No. 5627051
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDS CANDENSIS ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESSES:

ADDRESSEE: Barnes & Thornbury
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,359
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-25377
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
US-08-485-359-2

Query Match 74.0%; Score 97; DB 1; Length 108;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 27 CTGGSDCRCTVSCITDQNCNCPNA 49

RESULT 8
US-08-569-594-2
Sequence 2, Application US/08569594
Patent No. 5633451
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Barnes & Thornbury
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,594
FILING DATE:
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-25377
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
PCT-US96-08815-2

TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
US-08-569-594-2

Query Match 74.0%; Score 97; DB 1; Length 108;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 27 CTGGSDCRCTVSCITDQNCNCPNA 49

RESULT 9
PCT-US96-08815-2
Sequence 2, Application PC/TUS9608815
GENERAL INFORMATION:
APPLICANT: Duman, John G.
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
TITLE OF INVENTION: DENDROIDES ANTIFREEZE PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Barnes & Thornbury
STREET: 11 South Meridian
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46204
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/08815
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-27026
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
PCT-US96-08815-2

Query Match 74.0%; Score 97; DB 5; Length 108;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 27 CTGGSDCRCTVSCITDQNCNCPNA 49

RESULT 10
US-08-485-359-4
; Sequence 4, Application US/08485359
; Patent No. 5627051
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,359
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHEICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-485-359-4
Query Match 74.0%; Score 97; DB 1; Length 109;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;
QY 2 CTGXADCTCTXACTGCGKCPNA 24
DB 27 CTGSDCRCTVSCDQCNCNCPNA 49
RESULT 11
US-08-569-594-4
; Sequence 4, Application US/08569594
; Patent No. 5633451
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,594
FILING DATE:
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Lammert, Steven R.
REGISTRATION NUMBER: 27653
REFERENCE/DOCKET NUMBER: 835910-25377
TELECOMMUNICATION INFORMATION:
TELEPHONE: (317) 231-7258
TELEFAX: (317) 231-7433
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHEICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
US-08-569-594-4

Query Match 74.0%; Score 97; DB 1; Length 109;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGKCPNA 24
DB 27 CTGSDCRCTVSCDQCNCNCPNA 49

RESULT 12
PCT-US96-08815-4
; Sequence 4, Application PC/TUS9608815
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: DENDROIDES ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/08815
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-27026
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHEICAL: YES

ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Dendroides canadensis
PCT-US96-08815-4

Query Match 74.0%; Score 97; DB 5; Length 109;
Best Local Similarity 65.2%; Pred. No. 2.6e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 27 CTGGSDCRCTCTCTATCTGCACC 49

RESULT 13
US-09-738-884-1
Sequence 1, Application US/09738884
Patent No. 6391606
GENERAL INFORMATION:
APPLICANT: GUEGLER, Karl et al
TITLE OF INVENTION: ISOLATED HUMAN PHOSPHOLIPASE PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHOLIPASE
TITLE OF INVENTION: PROTEIN, AND USES THEREOF
FILE REFERENCE: C1000849
CURRENT APPLICATION NUMBER: US/09/738,884
CURRENT FILING DATE: 2000-12-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1
LENGTH: 2211
TYPE: PRT
ORGANISM: Human
US-09-738-884-1

Query Match 56.1%; Score 73.5; DB 4; Length 2211;
Best Local Similarity 56.5%; Pred. No. 0.22;
Matches 13; Conservative 0; Mismatches 7; Indels 3; Gaps 1;

QY 2 CTGXADCTCTXACTGCGXCPNA 21
DB 396 CTGGATCCACTCTATCTGCACC 418

RESULT 14
US-09-627-650B-5
Sequence 5, Application US/09627650B
Patent No. 6406872
GENERAL INFORMATION:
APPLICANT: Bamber, Bruce
APPLICANT: Jorgensen, Erik
TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: 21101.000903
CURRENT APPLICATION NUMBER: US/09/627,650B
CURRENT FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: 09/436,063
PRIOR FILING DATE: 1999-11-08
PRIOR APPLICATION NUMBER: 60/107,727
PRIOR FILING DATE: 1998-11-09
NUMBER OF SEQ ID NOS: 50
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 5
LENGTH: 1917
TYPE: PRT
ORGANISM: Caenorhabditis elegans
US-09-627-650B-5

Query Match 55.7%; Score 73; DB 4; Length 1917;
Best Local Similarity 52.2%; Pred. No. 0.22;
Matches 12; Conservative 1; Mismatches 10; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 1693 CTGGGCTCTCTATCTGCACC 1715

DB 1693 CTGGGCTCTCTATCTGCACC 1715

RESULT 15
US-09-436-063C-5
Sequence 5, Application US/09436063C
Patent No. 6407210
GENERAL INFORMATION:
APPLICANT: Bamber, Bruce
APPLICANT: Jorgensen, Erik
TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
TITLE OF INVENTION: Methods Related Thereto
FILE REFERENCE: P-1095corrected
CURRENT APPLICATION NUMBER: US/09/436,063C
CURRENT FILING DATE: 1999-11-08
PRIOR APPLICATION NUMBER: 60/107727
PRIOR FILING DATE: 1998-11-09
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 5
LENGTH: 1917
TYPE: PRT
ORGANISM: Caenorhabditis elegans
US-09-436-063C-5

Query Match 55.7%; Score 73; DB 4; Length 1917;
Best Local Similarity 52.2%; Pred. No. 0.22;
Matches 12; Conservative 1; Mismatches 10; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24
DB 1693 CTGGGCTCTCTATCTGCACC 1715

Search completed: May 16, 2003, 09:10:25
Job time: 6.52632 secs

GenCore version 5.1.4.p5.4578
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OM protein - protein search, using sw model

Run on: May 16, 2003, 08:29:25 ; Search time 3.68421 Seconds
(without alignments)
127.780 Million cell updates/sec

Title: US-10-032-658-3

Perfect score: 64

Sequence: 1 XCTXXXTXCTXXCT 16

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Minimum DB seq length: 0
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Maximum Match 100%
Listing first 45 summaries

Database :

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- 2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep:*
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- 6: /cgn2_6/ptodata/1/1aa/Backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
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| 2 | 53 | 82.8 | 124 | 4 | US-08-882-907-17 |
| 3 | 53 | 82.8 | 124 | 4 | US-08-882-907-19 |
| 4 | 52 | 81.2 | 24 | 4 | US-08-882-907-4 |
| 5 | 52 | 81.2 | 112 | 4 | US-08-882-907-11 |
| 6 | 52 | 81.2 | 112 | 4 | US-08-882-907-13 |
| 7 | 49 | 76.6 | 16 | 4 | US-08-882-907-3 |
| 8 | 48 | 75.0 | 45 | 4 | US-08-900-230-14 |
| 9 | 47 | 73.4 | 50 | 4 | US-08-900-230-38 |
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| 11 | 47 | 73.4 | 1128 | 4 | US-09-627-6508-11 |
| 12 | 47 | 73.4 | 1652 | 4 | US-09-627-6508-11 |
| 13 | 47 | 73.4 | 1652 | 4 | US-09-627-6508-11 |
| 14 | 47 | 73.4 | 2508 | 4 | US-09-627-6508-7 |
| 15 | 47 | 73.4 | 2508 | 4 | US-09-627-6508-7 |
| 16 | 47 | 73.4 | 2544 | 4 | US-09-627-6508-3 |
| 17 | 47 | 73.4 | 2544 | 4 | US-09-627-6508-3 |
| 18 | 47 | 73.4 | 2601 | 4 | US-09-627-6508-9 |
| 19 | 47 | 73.4 | 2601 | 4 | US-09-627-6508-9 |
| 20 | 46 | 71.9 | 24 | 1 | US-08-036-063C-9 |
| 21 | 46 | 71.9 | 24 | 1 | US-08-036-063C-9 |
| 22 | 46 | 71.9 | 24 | 1 | US-08-469-555B-41 |
| 23 | 46 | 71.9 | 24 | 1 | US-08-469-555B-41 |
| 24 | 46 | 71.9 | 24 | 1 | US-08-469-526A-41 |
| 25 | 46 | 71.9 | 24 | 1 | US-08-469-526A-41 |
| 26 | 46 | 71.9 | 24 | 2 | US-08-469-660-41 |
| 27 | 46 | 71.9 | 24 | 4 | US-08-735-021-41 |

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| 28 | 46 | 71.9 | 24 | 5 | PCT-US94-05083C-41 | Sequence 41, Appl |
| 29 | 46 | 71.9 | 24 | 5 | PCT-US95-06846A-41 | Sequence 41, Appl |
| 30 | 46 | 71.9 | 108 | 1 | US-08-485-359-2 | Sequence 2, Appl1 |
| 31 | 46 | 71.9 | 108 | 1 | US-08-569-594-2 | Sequence 2, Appl1 |
| 32 | 46 | 71.9 | 108 | 5 | PCT-US96-08815-2 | Sequence 2, Appl1 |
| 33 | 46 | 71.9 | 109 | 1 | US-08-485-359-4 | Sequence 4, Appl1 |
| 34 | 46 | 71.9 | 109 | 1 | US-08-569-594-4 | Sequence 4, Appl1 |
| 35 | 46 | 71.9 | 109 | 5 | PCT-US96-08815-4 | Sequence 4, Appl1 |
| 36 | 45 | 70.3 | 1345 | 2 | US-08-977-767-3 | Sequence 4, Appl1 |
| 37 | 43 | 67.2 | 1417 | 4 | US-08-900-230-3 | Sequence 4, Appl1 |
| 38 | 43 | 67.2 | 2088 | 4 | US-09-548-372D-13 | Sequence 13, Appl |
| 39 | 43 | 67.2 | 2088 | 4 | US-09-548-372D-13 | Sequence 13, Appl |
| 40 | 41.5 | 64.8 | 2211 | 4 | US-09-738-884-1 | Sequence 1, Appl1 |
| 41 | 41 | 64.1 | 1400 | 4 | US-08-630-915A-37 | Sequence 37, Appl |
| 42 | 41 | 64.1 | 1917 | 4 | US-09-627-6508-5 | Sequence 5, Appl1 |
| 43 | 41 | 64.1 | 1917 | 4 | US-09-627-6508-5 | Sequence 5, Appl1 |
| 44 | 40 | 62.5 | 45 | 4 | US-08-900-230-10 | Sequence 10, Appl |
| 45 | 40 | 62.5 | 57 | 1 | US-07-609-716-56 | Sequence 56, Appl |

ALIGNMENTS

RESULT 1
US-08-882-907-15
; Sequence 15, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 148 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-882-907-15
Query Match 84.4%; Score 54; DB 4; Length 148;
Best Local Similarity 53.3%; Pred. No. 0.61;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
OY 2 CTFXXXTXCTXXCT 16
DB 30 CTGADCTCTACT 44

RESULT 2
US-08-882-907-17
Sequence 17, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-882-907-17
Query Match 82.8%; Score 53; DB 4; Length 124;
Best Local Similarity 53.3%; Pred. No. 0.72;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXCTXCTXXCT 16
DB 30 CTGADCTCTACT 44

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-882-907-19
Query Match 82.8%; Score 53; DB 4; Length 124;
Best Local Similarity 53.3%; Pred. No. 0.72;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXCTXCTXXCT 16
DB 30 CTGADCTCTACT 44

RESULT 4
US-08-882-907-4
Sequence 4, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
APPLICANT: Davies, Peter L.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Peptide

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FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
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FEATURE:
NAME/KEY: Modified-site
LOCATION: 5
OTHER INFORMATION: /product="OTHER"
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FEATURE:
NAME/KEY: Modified-site
LOCATION: 13
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OTHER INFORMATION: /note="Xaa = Ala, Asp or Gly"
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NAME/KEY: Modified-site
LOCATION: 20
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OTHER INFORMATION: /note="Xaa = Asn or Ser"
US-08-882-907-4

Query Match 81.2%; Score 52; DB 4; Length 24;
Best Local Similarity 66.7%; Pred. No. 0.3;
Matches 10; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 2 CTGADCTCTGACT 16

RESULT 5
US-08-882-907-11
Sequence 11, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESS: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0300
TELEFAX: (415) 576-0200
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear
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MOLECULE TYPE: protein
US-08-882-907-11

Query Match 81.2%; Score 52; DB 4; Length 112;
Best Local Similarity 53.3%; Pred. No. 0.89;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 30 CTGADCTCTGACT 44

RESULT 6
US-08-882-907-13
Sequence 13, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESS: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0300
TELEFAX: (415) 576-0200
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-882-907-13

Query Match 81.2%; Score 52; DB 4; Length 112;
Best Local Similarity 53.3%; Pred. No. 0.89;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 30 CTGADCTCTGACT 44

RESULT 7
US-08-882-907-3
Sequence 3, Application US/08882907
Patent No. 6392024
GENERAL INFORMATION:
APPLICANT: Graham, Laurie A.
APPLICANT: Liou, Yih-Cherng
APPLICANT: Walker, Virginia K.
TITLE OF INVENTION: Tenebrio Antifreeze Proteins
```

NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,907
FILING DATE: 26-JUN-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Kenneth A.
REGISTRATION NUMBER: 31,677
REFERENCE/DOCKET NUMBER: 016252-002100US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Peptide
LOCATION: 1..16
OTHER INFORMATION: /note="consensus 16 amino acid
OTHER INFORMATION: N-terminal motif for YL-1, YL-2, YL-3
OTHER INFORMATION: and YL-4"
US-08-882-907-3
Query Match 76.6%; Score 49; DB 4; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.53;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CTXXXCTCTXXCT 16
Db 2 CTXXXCTCTXXCT 16
RESULT 8
US-08-900-230-14
Sequence 14, Application US/08900230
Patent No. 6329197
GENERAL INFORMATION:
APPLICANT: Bard, Jonathan A.
TITLE OF INVENTION: DNA ENCODING GALANN GALR3 RECEPTORS AND
TITLE OF INVENTION: USES THEREOF
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of The Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 11036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/900,230
FILING DATE: 23-JUL-1997
CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 52241-C/JPW/ADM
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 45 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE:
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-900-230-14
Query Match 75.0%; Score 48; DB 4; Length 45;
Best Local Similarity 46.7%; Pred. No. 1.5;
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;
QY 2 CTXXXCTCTXXCT 16
Db 25 CTTAGCTACTGCT 39
RESULT 9
US-08-900-230-58
Sequence 58, Application US/08900230
Patent No. 6329197
GENERAL INFORMATION:
APPLICANT: Bard, Jonathan A.
TITLE OF INVENTION: DNA ENCODING GALANN GALR3 RECEPTORS AND
TITLE OF INVENTION: USES THEREOF
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of The Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 11036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/900,230
FILING DATE: 23-JUL-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 52241-C/JPW/ADM
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO: 58:
SEQUENCE CHARACTERISTICS:
LENGTH: 50 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE:
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-900-230-58
Query Match 73.4%; Score 47; DB 4; Length 50;
Best Local Similarity 46.7%; Pred. No. 2.1;
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTXCTXXCT 16
 Db 9 CTAATGAGACTACT 23

RESULT 10
 US-09-627-650B-11
 ; Sequence 11, Application US/09627650B
 ; Patent No. 6406872
 ; GENERAL INFORMATION:
 ; APPLICANT: Bamder, Bruce
 ; APPLICANT: Jorgensen, Erik
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
 ; FILE REFERENCE: 21101.000903
 ; CURRENT APPLICATION NUMBER: US/09/627,650B
 ; CURRENT FILING DATE: 2000-07-28
 ; PRIOR APPLICATION NUMBER: 09/436,063
 ; PRIOR FILING DATE: 1999-11-08
 ; PRIOR APPLICATION NUMBER: 60/107,727
 ; PRIOR FILING DATE: 1998-11-09
 ; NUMBER OF SEQ ID NOS: 50
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 11
 ; LENGTH: 1128
 ; TYPE: PRT
 ; ORGANISM: Caenorhabditis elegans
 US-09-627-650B-11

Query Match 73.4%; Score 47; DB 4; Length 1128;
 Best Local Similarity 46.7%; Pred. No. 19;
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTXCTXXCT 16
 Db 575 CGGTTCTGCTACT 589

RESULT 11
 US-09-436-063C-11
 ; Sequence 11, Application US/09436063C
 ; Patent No. 6407210
 ; GENERAL INFORMATION:
 ; APPLICANT: Bamder, Bruce
 ; APPLICANT: Jorgensen, Erik
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
 ; FILE REFERENCE: P-1095corrected
 ; CURRENT APPLICATION NUMBER: US/09/436,063C
 ; CURRENT FILING DATE: 1999-11-08
 ; PRIOR APPLICATION NUMBER: 60/107727
 ; PRIOR FILING DATE: 1998-11-09
 ; NUMBER OF SEQ ID NOS: 18
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 11
 ; LENGTH: 1128
 ; TYPE: PRT
 ; ORGANISM: Caenorhabditis elegans
 US-09-436-063C-11

Query Match 73.4%; Score 47; DB 4; Length 1128;
 Best Local Similarity 46.7%; Pred. No. 19;
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTXCTXXCT 16
 Db 575 CGGTTCTGCTACT 589

RESULT 12
 US-09-627-650B-1
 ; Sequence 1, Application US/09627650B

Patent No. 6406872
 ; GENERAL INFORMATION:
 ; APPLICANT: Bamder, Bruce
 ; APPLICANT: Jorgensen, Erik
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
 ; FILE REFERENCE: 21101.000903
 ; CURRENT APPLICATION NUMBER: US/09/627,650B
 ; CURRENT FILING DATE: 2000-07-28
 ; PRIOR APPLICATION NUMBER: 09/436,063
 ; PRIOR FILING DATE: 1999-11-08
 ; PRIOR APPLICATION NUMBER: 60/107,727
 ; PRIOR FILING DATE: 1998-11-09
 ; NUMBER OF SEQ ID NOS: 50
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 1
 ; LENGTH: 1652
 ; TYPE: PRT
 ; ORGANISM: Caenorhabditis elegans
 US-09-627-650B-1

Query Match 73.4%; Score 47; DB 4; Length 1652;
 Best Local Similarity 46.7%; Pred. No. 25;
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTXCTXXCT 16
 Db 1076 CGGTTCTGCTACT 1090

RESULT 13
 US-09-436-063C-1
 ; Sequence 1, Application US/09436063C
 ; Patent No. 6407210
 ; GENERAL INFORMATION:
 ; APPLICANT: Bamder, Bruce
 ; APPLICANT: Jorgensen, Erik
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
 ; FILE REFERENCE: P-1095corrected
 ; CURRENT APPLICATION NUMBER: US/09/436,063C
 ; CURRENT FILING DATE: 1999-11-08
 ; PRIOR APPLICATION NUMBER: 60/107727
 ; PRIOR FILING DATE: 1998-11-09
 ; NUMBER OF SEQ ID NOS: 18
 ; SOFTWARE: Patentin Ver. 2.1
 ; SEQ ID NO 1
 ; LENGTH: 1652
 ; TYPE: PRT
 ; ORGANISM: Caenorhabditis elegans
 US-09-436-063C-1

Query Match 73.4%; Score 47; DB 4; Length 1652;
 Best Local Similarity 46.7%; Pred. No. 25;
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTXCTXXCT 16
 Db 1076 CGGTTCTGCTACT 1090

RESULT 14
 US-09-627-650B-7
 ; Sequence 7, Application US/09627650B
 ; Patent No. 6406872
 ; GENERAL INFORMATION:
 ; APPLICANT: Bamder, Bruce
 ; APPLICANT: Jorgensen, Erik
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
 ; FILE REFERENCE: 21101.000903
 ; CURRENT APPLICATION NUMBER: US/09/627,650B
 ; CURRENT FILING DATE: 2000-07-28

; PRIOR APPLICATION NUMBER: 09/436,063
; PRIOR FILING DATE: 1999-11-08
; PRIOR APPLICATION NUMBER: 60/107,727
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 7
; LENGTH: 2508
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-09-627-650B-7

Query Match 73.4%; Score 47; DB 4; Length 2508;
Best Local Similarity 46.7%; Pred. No. 34;
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Oy 2 CTXXXXCTXCTXCT 16
| | | | |
Db 1960 CGGTTCTGCTATCT 1974

RESULT 15
US-09-436-063C-7
; Sequence 7, Application US/09436063C
; Patent No. 6407210
; GENERAL INFORMATION:
; APPLICANT: Bamder, Bruce
; APPLICANT: Jorgensen, Erik
; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and
; TITLE OF INVENTION: Methods Related Thereto
; FILE REFERENCE: P-1095corrected
; CURRENT APPLICATION NUMBER: US/09/436,063C
; CURRENT FILING DATE: 1999-11-08
; PRIOR APPLICATION NUMBER: 60/107727
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 7
; LENGTH: 2508
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-09-436-063C-7

Query Match 73.4%; Score 47; DB 4; Length 2508;
Best Local Similarity 46.7%; Pred. No. 34;
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Oy 2 CTXXXXCTXCTXCT 16
| | | | |
Db 1960 CGGTTCTGCTATCT 1974

Search completed: May 16, 2003, 09:10:24
Job time : 5.68421 secs

GenCore version 5.1.4.P5-4578
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OM protein - protein search, using sw model

Run on: May 16, 2003, 09:00:41 ; Search time 4.52632 Seconds

(without alignments)
340.942 Million cell updates/sec

Title: US-10-032-658-3

Perfect score: 64
Sequence: 1 XCTXXXXCTXCTXCT 16Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 362588 seqs, 96450795 residues

Total number of hits satisfying chosen parameters: 362588

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*

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2: /cgn2-6/ptodata/1/pubppaa/PCT_NEW_PUB pep:*

3: /cgn2-6/ptodata/1/pubppaa/US06_NEW_PUB pep:*

4: /cgn2-6/ptodata/1/pubppaa/US06_PUBCOMB pep:*

5: /cgn2-6/ptodata/1/pubppaa/US07_NEW_PUB pep:*

6: /cgn2-6/ptodata/1/pubppaa/US07_PUBCOMB pep:*

7: /cgn2-6/ptodata/1/pubppaa/PCTUS_PUBCOMB pep:*

8: /cgn2-6/ptodata/1/pubppaa/US08_PUBCOMB pep:*

9: /cgn2-6/ptodata/1/pubppaa/US09_NEW_PUB pep:*

10: /cgn2-6/ptodata/1/pubppaa/US09_PUBCOMB pep:*

11: /cgn2-6/ptodata/1/pubppaa/US10_NEW_PUB pep:*

12: /cgn2-6/ptodata/1/pubppaa/US10_PUBCOMB pep:*

13: /cgn2-6/ptodata/1/pubppaa/US60_NEW_PUB pep:*

14: /cgn2-6/ptodata/1/pubppaa/US60_PUBCOMB pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------------------|-------------------|
| 1 | 55 | 85.9 | 2477 | US-10-123-155-331 | Sequence 331, App |
| 2 | 54 | 84.4 | 148 | US-10-032-658-15 | Sequence 15, Appl |
| 3 | 54 | 84.4 | 539 | US-10-184-644-531 | Sequence 531, App |
| 4 | 54 | 84.4 | 539 | US-10-184-634-531 | Sequence 531, App |
| 5 | 54 | 84.4 | 1750 | US-09-791-279-86 | Sequence 86, Appl |
| 6 | 54 | 84.4 | 1750 | US-10-184-644-387 | Sequence 387, App |
| 7 | 54 | 84.4 | 1750 | US-10-123-155-187 | Sequence 187, App |
| 8 | 54 | 84.4 | 1750 | US-10-184-634-397 | Sequence 397, App |
| 9 | 54 | 84.4 | 2128 | US-10-184-634-171 | Sequence 171, App |
| 10 | 54 | 84.4 | 2128 | US-10-184-634-171 | Sequence 171, App |
| 11 | 53 | 82.8 | 124 | US-10-032-658-17 | Sequence 17, Appl |
| 12 | 53 | 82.8 | 1917 | US-10-184-644-159 | Sequence 159, App |
| 13 | 53 | 82.8 | 1917 | US-10-184-634-159 | Sequence 159, App |
| 14 | 53 | 82.8 | 2120 | US-10-123-155-73 | Sequence 73, Appl |
| 15 | 53 | 81.2 | 24 | US-10-032-658-4 | Sequence 4, Appl |
| 16 | 52 | 81.2 | 112 | US-10-032-658-11 | Sequence 11, Appl |
| 17 | 52 | 81.2 | 112 | US-10-032-658-13 | Sequence 13, Appl |
| 18 | 52 | 81.2 | 112 | US-10-032-658-13 | Sequence 13, Appl |
| 19 | 52 | 81.2 | 944 | US-10-268-473-4 | Sequence 4, Appl |

| | | | | | |
|----|----|------|------|-------------------|-------------------|
| 20 | 52 | 81.2 | 1177 | US-10-184-644-381 | Sequence 381, App |
| 21 | 52 | 81.2 | 1177 | US-10-184-634-381 | Sequence 381, App |
| 22 | 52 | 81.2 | 1410 | US-10-184-644-123 | Sequence 123, App |
| 23 | 52 | 81.2 | 1410 | US-10-184-634-123 | Sequence 123, App |
| 24 | 52 | 81.2 | 2747 | US-10-184-644-101 | Sequence 101, App |
| 25 | 52 | 81.2 | 2747 | US-10-184-634-101 | Sequence 101, App |
| 26 | 52 | 81.2 | 2916 | US-10-123-155-69 | Sequence 69, Appl |
| 27 | 52 | 81.2 | 3089 | US-10-184-634-61 | Sequence 61, Appl |
| 28 | 52 | 81.2 | 3089 | US-10-184-634-61 | Sequence 61, Appl |
| 29 | 52 | 81.2 | 3479 | US-10-123-155-123 | Sequence 123, App |
| 30 | 52 | 81.2 | 3671 | US-10-184-644-265 | Sequence 265, App |
| 31 | 52 | 81.2 | 3671 | US-10-184-634-265 | Sequence 265, App |
| 32 | 52 | 81.2 | 3951 | US-10-184-644-119 | Sequence 119, App |
| 33 | 52 | 81.2 | 3951 | US-10-184-634-119 | Sequence 119, App |
| 34 | 52 | 81.2 | 4060 | US-10-123-155-197 | Sequence 197, App |
| 35 | 51 | 79.7 | 1158 | US-10-184-644-437 | Sequence 437, App |
| 36 | 51 | 79.7 | 1158 | US-10-184-634-437 | Sequence 437, App |
| 37 | 51 | 79.7 | 1487 | US-10-184-644-5 | Sequence 5, Appl |
| 38 | 51 | 79.7 | 1487 | US-10-184-634-5 | Sequence 5, Appl |
| 39 | 51 | 79.7 | 1554 | US-10-184-644-297 | Sequence 297, App |
| 40 | 51 | 79.7 | 1554 | US-10-184-634-297 | Sequence 297, App |
| 41 | 51 | 79.7 | 2281 | US-10-184-644-253 | Sequence 253, App |
| 42 | 51 | 79.7 | 2281 | US-10-184-634-253 | Sequence 253, App |
| 43 | 51 | 79.7 | 2387 | US-10-123-155-527 | Sequence 527, App |
| 44 | 51 | 79.7 | 2806 | US-10-123-155-201 | Sequence 201, App |
| 45 | 51 | 79.7 | 3322 | US-10-184-644-489 | Sequence 489, App |

ALIGNMENTS

RESULT 1

US-10-123-155-331

Sequence 331, Application US/10123155

Publication No. US20030068794A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: Desnoyers, Luc

APPLICANT: Flivaoroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerlitsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

FILE OF INVENTION: ACIDS ENCODING THE SAME

FILE REFERENCE: P330301C30

CURRENT APPLICATION NUMBER: US/10/123, 155

Prior Application removed - See Palm or File Wrapper

NUMBER OF SEQ ID NOS: 550

SEQ ID NO 331

LENGTH: 2477

TYPE: DNA

ORGANISM: Homo Sapien

US-10-123-155-331

Query Match 85.9%; Score 55; DB 9; Length 2477;

Best Local Similarity 53.3%; Pred. No. 5.1;

Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXXCTXCTXCT 16

Db 1581 CTTTGCTACTTCT 1595

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RESULT 2
US-10-032-658-15
; Sequence 15, Application US/10032658
; Patent No. US2002016583A1
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
;           Liou, Yih-Cheng
;           Walker, Virginia K.
;           Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/032,658
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 148 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-10-032-658-15

Query Match      84.4%; Score 54; DB 9; Length 148;
Best Local Similarity 53.3%; Pred. No. 0.9;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16
DB 30 CTGAADCTCTACT 44

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; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C227
; CURRENT APPLICATION NUMBER: US/10/184,644
; PRIOR APPLICATION: 2002-06-28
; NUMBER OF SEQ ID NOS: 612
; LENGTH: 539
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-644-531

Query Match      84.4%; Score 54; DB 9; Length 539;
Best Local Similarity 53.3%; Pred. No. 2.3;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16
DB 212 CTGATCTCTGTCT 226

RESULT 4
US-10-184-634-531
; Sequence 531, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION: 2001-02-23
; NUMBER OF SEQ ID NOS: 612
; LENGTH: 539
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-634-531

Query Match      84.4%; Score 54; DB 9; Length 539;
Best Local Similarity 53.3%; Pred. No. 2.3;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16
DB 212 CTGATCTCTGTCT 226

RESULT 5
US-09-791-279-86
; Sequence 86, Application US/09791279
; Publication No. US20030050456A1
; GENERAL INFORMATION:
; APPLICANT: Vogeli, Gabriel
; APPLICANT: Wood, Linda S.
; APPLICANT: Parodi, Luis
; APPLICANT: Lind, Peter
; TITLE OF INVENTION: No. US20030050456A1 G Protein-Coupled Receptors
; FILE REFERENCE: 00048.0S1
; CURRENT APPLICATION NUMBER: US/09/791,279
; CURRENT FILING DATE: 2001-02-23

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; PRIOR APPLICATION NUMBER: 60/184,715
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,725
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,712
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,606
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,602
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,604
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,822
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,710
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,689
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,690
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/184,716
; PRIOR FILING DATE: 2000-02-24
; NUMBER OF SEQ ID NOS: 220
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 86
; LENGTH: 630
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-791-279-86
```

```

Query Match      84.4%; Score 54; DB 9; Length 630;
Best Local Similarity 53.3%; Pred. No. 2.6;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
```

```
QY      2 CTXXXXCTXCTXXCT 16
        || || || ||
DB      45 CTTGGCTACTTCTCT 59
```

```

RESULT 6
US-10-184-644-397
; Sequence 397, Application US/10184644
; Publication No. US20030044930A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C227
; CURRENT APPLICATION NUMBER: US/10/184,644
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 397
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-644-397
```

```

Query Match      84.4%; Score 54; DB 9; Length 1750;
Best Local Similarity 53.3%; Pred. No. 5.3;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
```

```
QY      2 CTXXXXCTXCTXXCT 16
```

```

DB      264 CTGAACCTCTGACT 278
```

```

RESULT 7
US-10-123-155-187
; Sequence 187, Application US/10123155
; Publication No. US20030068794A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerlitsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C30
; CURRENT APPLICATION NUMBER: US/10/123,155
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 187
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-187
```

```

Query Match      84.4%; Score 54; DB 9; Length 1750;
Best Local Similarity 53.3%; Pred. No. 5.3;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
```

```
QY      2 CTXXXXCTXCTXXCT 16
        || || || || ||
DB      264 CTGAACCTCTGACT 278
```

```

RESULT 8
US-10-184-634-397
; Sequence 397, Application US/10184634
; Publication No. US2003006864A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 397
; LENGTH: 1750
```

```

; TYPE: DNA
; ORGANISM: Homo Saplen
US-10-184-634-397

Query Match
Best Local Similarity 84.4%; Score 54; DB 9; Length 1750;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXXCTXXCT 16
Db 264 CTGAACCTCTCTGACT 278

RESULT 9
US-10-184-644-171
; Sequence 171, Application US/10184644
; Publication No. US20030044930A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C227
; CURRENT APPLICATION NUMBER: US/10/184,644
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 171
; LENGTH: 2128
; TYPE: DNA
; ORGANISM: Homo Saplen
US-10-184-644-171

Query Match
Best Local Similarity 84.4%; Score 54; DB 9; Length 2128;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXXCTXXCT 16
Db 1649 CTGAGACTCTCTCTCT 1663

RESULT 10
US-10-184-634-171
; Sequence 171, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm

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```

; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 171
; LENGTH: 2128
; TYPE: DNA
; ORGANISM: Homo Saplen
US-10-184-634-171

Query Match
Best Local Similarity 84.4%; Score 54; DB 9; Length 2128;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXXCTXXCT 16
Db 1649 CTGAGACTCTCTCTCT 1663

RESULT 11
US-10-032-658-17
; Sequence 17, Application US/10032658
; Patent No. US20020165383A1
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Lion, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/032,658
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-00210005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-10-032-658-17

Query Match
Best Local Similarity 82.8%; Score 53; DB 9; Length 124;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXXCTXXCT 16
Db 30 CTGADCTCTACT 44

RESULT 12
US-10-032-658-19

```

```
; Sequence 19, Application US/10032658
; Patent No. US20020165383A1
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
;           Liou, Yih-Cheng
;           Walker, Virginia K.
;           Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESS: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/032,658
; FILING DATE: 02-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-10-032-658-19
;
; Query Match      82.8%; Score 53; DB 9; Length 124;
; Best Local Similarity 53.3%; Pred. No. 1.1;
; Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXXCTXCTXXCT 16
DB 30 CTGADCTCTACT 44
;
RESULT 13
US-10-184-644-159
; Sequence 159, Application US/10184644
; Publication No. US20030044930A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C227
; CURRENT APPLICATION NUMBER: US/10/184,644
; APPLICATION NUMBER: US/10/184,644
```

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; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 159
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-644-159
;
; Query Match      82.8%; Score 53; DB 9; Length 1917;
; Best Local Similarity 53.3%; Pred. No. 7.6;
; Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXXCTXCTXXCT 16
DB 688 CTCATTCTTCTGTCT 702
;
RESULT 14
US-10-184-634-159
; Sequence 159, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 159
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-634-159
;
; Query Match      82.8%; Score 53; DB 9; Length 1917;
; Best Local Similarity 53.3%; Pred. No. 7.6;
; Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXXCTXCTXXCT 16
DB 688 CTCATTCTTCTGTCT 702
;
RESULT 15
US-10-123-155-73
; Sequence 73, Application US/10123155
; Publication No. US20030068794A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
```

```

; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang,Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C30
; CURRENT APPLICATION NUMBER: US/10/123,155
; PRIOR APPLICATION REMOVED - See Palm or File Wrapper
; SEQ ID NO 73
; LENGTH: 2120
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-123-155-73

```

```

Query Match      82.8%; Score 53; DB 9; Length 2120;
Best Local Similarity 53.3%; Pred. No. 8.2;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 2 CTXXXXCTXCTXCT 16
DB 1248 CTGTTCTCTCTCTCT 1262

```

Search completed: May 16, 2003, 09:19:38
 Job time : 5.52632 secs